Danfoss

Refrigeration Note Product Info

Expansion Valves Types TUA, TUAE - Installation Instructions

4mr

5/22

Elimate callbacks by using the procedures described in this bulletin.

By using these procedures, you will:

- Greatly reduce leak potential
- Correctly set superheat to:
 - Elimate floodback
 - Maintain proper temperature

How to adjust superheat:

- 1. remove the cap with a 4mm Allen wrench;
- make superheat adjustments ¼ turn at a time (¼ turn = 1°F). Turning clockwise increases superheat. Turning counter-clockwise decreases superheat.
- 3. reinstall the cap.

Note: TXVs on low temperature systems may require more adjustment as the factory setting is for medium temperature systems.

Should you need to replace the valve:

The valve model and part number are laser-engraved on the power head. The orifice number is on the bottom of the orifice assembly.

A wet rag is not needed when sweating in the replacement valve, but protect the capillary tube from torch heat.

Adjust superheat using the procedure in this Bulletin.

How to measure superheat:

- 1. Gauge suction pressure, and determine suction pipe temperature as close as possible to the TXV sensing bulb.
- 2. Now, using a pressure temperature chart, convert the suction pressure to its corresponding temperature. Subtract this temperature from the thermometer reading. The difference is superheat.

The superheat needed is based upon the system manufacturer's specifications for the application.

IMPORTANT -- Orifice Screen:

To prevent TXV plugging, there is a screen over the orifice assembly that can be cleaned or changed.

For service, remove the orifice assembly.

After cleaning, the screen must be reinstalled with the correct end up. There should be no visible gap between the screen cage and the orifice assembly.

Installing Orifice Assembly

1. Before reinstalling the orifice assembly, the metal gasket should be replaced.



- 2. Oil the assembly between the screen cage and the pushpin.
- Torque the assembly to 28 ft-lb. In addition to eliminating leaks, proper torquing insures proper superheat.
- 4. After re-installing the orifice assembly, check superheat, and adjust to the system manufacturer's specification if necessary.

Spare Parts:

Gaskets: 068U0015 Screen: 068U1706 (can be used on any TUA orifice)

If you need assistance, call Danfoss at: 1-888-DANFOSS

Danfoss Inc., 7941 Corporate Drive, Baltimore, MD 21236 Tel. 1-888-Danfoss, Fax 410-931-8256, www.danfoss.com/North_America

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.